

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently amended) A method for processing shared sub-packets in a communication system, the method comprising:

generating a first control channel comprising (a) an indicator that a sub-packet of a traffic channel is to be shared by a plurality of subscriber stations, the sub-packet comprising at least one slot, the slot comprising at least two sub-slots, and (b) parameters of the shared sub-packet of the traffic channel; and

generating at least one second control channel, each of said at least one second control channel comprising (a) an identity of at least one subscriber station intended to share the sub-packet and (b) information enabling the subscriber station to demodulate the traffic channel.

2. (Currently amended) The method as claimed in claim 1, wherein said ~~generating a first control channel comprising an indicator that a traffic channel is to be shared and a~~ parameters of ~~[[a]] the traffic channels channel comprises; comprise:~~

~~generating a first control channel comprising an indicator that a traffic channel is to be shared and a number of subscriber stations sharing a unit~~ the sub-packet of the traffic channel.

3. (Currently amended) The method as claimed in claim 2, wherein said ~~generating at least one second control channel, each of said at least one second control channel comprising an identity of at least one subscriber station and~~ information enabling the subscriber station to demodulate the traffic channel comprises:

~~generating at least one second control channel, each of said at least one second control channel comprising an identity of at least one subscriber station and a number of~~ code channels encoding the ~~[[unit]]~~ shared sub-packet of the traffic channel.

4. (Currently amended) The method as claimed in claim 1, further comprising:

transmitting the first control channel at a power required by a subscriber station with ~~[[the]]~~ a worst forward link quality metric among a plurality of subscriber stations for which the first control channel is intended.

5. (Currently amended) The method as claimed in claim 1, further comprising:

transmitting each of the at least one second control channel at a minimum power required by a subscriber station for which the at least one second control channel is intended.

6. (Currently amended) The method as claimed in claim 1, wherein said ~~generating a first control channel comprising an indicator that a traffic channel is to be shared and a~~ parameters of ~~[[a]] the traffic channels~~ channel ~~comprises: comprise:~~

~~generating a first control channel comprising an indicator that a traffic channel is to be shared;~~ a first number of sub-divisions of a ~~unit~~ the sub-packet of the traffic channel, and a second number of subscriber stations sharing the ~~[[unit]] sub-packet~~.

7. (Currently amended) The method as claimed in claim 6, wherein said ~~generating at least one second control channel, each of said at least one second control channel comprising an identity of at least one subscriber station and~~ information enabling the subscriber station to demodulate the traffic channel comprises:

~~generating at least one second control channel, each of said at least one second control channel comprising an identity of at least one subscriber station and~~ a starting sub-division of the ~~[[unit]] sub-packet~~ of the traffic channel for the subscriber station.

8. (Currently amended) A method for processing shared sub-packets at a first subscriber station, the method comprising:

at the first subscriber station, demodulating a first control channel to determine whether a sub-packet of a traffic channel is to be shared by a plurality of subscriber stations;

if the sub-packet of the traffic channel is to be shared, determining a number of subscriber stations sharing [[a]] the sub-packet of the traffic channel and multiplexing of the traffic channel in accordance with said demodulated first control channel if the traffic channel is to be shared;

demodulating a second control channel comprising (a) an identity of a subscriber station intended to share the sub-packet and (b) information enabling the subscriber station intended to share the sub-packet to demodulate [[a]] the traffic channel; and

if the subscriber station identity of the second control channel matches an identity of the first subscriber station, demodulating the traffic channel in accordance with said determined multiplexing and the enabling information if the identity is identical to an identity of the subscriber station.

9. (Currently amended) The method as claimed in claim 8, further comprising:

if the subscriber station identity of the second control channel does not match the identity of the first subscriber station and a third control channel is transmitted, repeating said demodulating for another second the third control channel if the identity is not identical to an identity of the subscriber station and another second control channel is transmitted.

10. (Currently amended) The method as claimed in claim 8, wherein said demodulating a first control channel to determine whether [[a]] the sub-packet of the traffic channel is to be shared comprises:

demodulating a pre-determined forward packet data control channel.

11. (Currently amended) The method as claimed in claim 8, wherein said demodulating the traffic channel in accordance with said determined multiplexing and the enabling information if the acquired identity is identical to an identity of the subscriber station comprises:

determining a size of a traffic channel unit and a number of code channels in accordance with the enabling information if the traffic channel unit is code multiplexed; and

~~demodulate~~ demodulating the traffic channel unit.

12. (Currently amended) The method as claimed in claim 8, wherein said demodulating the traffic channel in accordance with the enabling information ~~if the acquired identity is identical to an identity of the subscriber station~~ comprises:

determining a number of sub-divisions of ~~traffic channel unit~~ the sub-packet and a starting sub-division in accordance with the enabling information if the ~~traffic channel unit sub-packet~~ is time multiplexed; and

~~demodulate~~ demodulating the ~~traffic channel unit~~ sub-packet.

13. (Currently amended) A method for processing shared sub-packets in a communication system, the method comprising:

generating a first control channel comprising (a) an indicator that a sub-packet of a traffic channel is to be shared by a plurality of subscriber stations and (b) parameters of the shared sub-packet of the traffic channel;

generating at least one second control channel, each of said at least one second control channel comprising (a) an identity of at least one subscriber station intended to share the sub-packet and (b) information enabling the subscriber station to demodulate the traffic channel;

transmitting the control channels;

at a first subscriber station, demodulating the received first control channel;

determining a number of subscriber stations sharing [[a]] the sub-packet of the traffic channel and multiplexing of the traffic channel in accordance with said demodulated control channel;

demodulating a second control channel comprising (a) an identity of a subscriber station and (b) information enabling the subscriber station intended to share the sub-packet to demodulate [[a]] the traffic channel; and

if the subscriber station identity of the second control channel matches an identity of the first subscriber station, demodulating the traffic channel in accordance with said determined multiplexing and the enabling information ~~if the acquired identity is identical to an identity of the subscriber station.~~

14. (Currently amended) The method as claimed in claim 13, wherein said ~~generating a first control channel comprising an indicator that a traffic channel is to be shared and~~ ~~[[a]]~~ parameters of ~~[[a]]~~ the traffic channels channel comprises: comprise:

~~generating a first control channel comprising an indicator that a traffic channel is to be shared and~~ a number of subscriber stations sharing ~~a unit~~ the sub-packet of the traffic channel.

15. (Currently amended) The method as claimed in claim 14, wherein said ~~generating at least one second control channel, each of said at least one second control channel comprising an identity of at least one subscriber station and~~ information enabling the subscriber station to demodulate the traffic channel comprises:

~~generating at least one second control channel, each of said at least one second control channel comprising an identity of at least one subscriber station and~~ a number of code channels encoding ~~a unit~~ shared sub-packet of the traffic channel.

16. (Currently amended) The method as claimed in claim 13, further comprising:

transmitting the first control channel at a power required by a subscriber station with ~~[[the]]~~ a worst forward link quality metric among a plurality of subscriber stations for which the first control channel is intended.

17. (Currently amended) The method as claimed in claim 13, further comprising:

transmitting each of the at least one second control channel at a minimum power required by a subscriber station for which the at least one second control channel is intended.

18. (Currently amended) The method as claimed in claim 13, wherein said ~~generating a first control channel comprising an indicator that a traffic channel is to be shared and~~ [[a]] parameters of [[a]] the traffic channels channel comprises: comprise:

~~generating a first control channel comprising an indicator that a traffic channel is to be shared,~~ a first number of sub-divisions of a unit the sub-packet of the traffic channel, and a second number of subscriber stations sharing the [[unit]] sub-packet.

19. (Currently amended) The method as claimed in claim 18, wherein said ~~generating at least one second control channel, each of said at least one second control channel comprising an identity of at least one subscriber station and information enabling the subscriber station to demodulate the traffic channel~~ comprises:

~~generating at least one second control channel, each of said at least one second control channel comprising an identity of at least one subscriber station and a starting sub-division of the~~ [[unit]] sub-packet of the traffic channel for the subscriber station.

20. (Currently amended) The method as claimed in claim 13, further comprising:

if the subscriber station identity of the second control channel does not match the identity of the first subscriber station and a third control channel is transmitted, repeating said demodulating for another second the third control channel if the identity is not identical to an identity of the subscriber station and another second control channel is transmitted.

21. (Currently amended) The method as claimed in claim 13, wherein said demodulating a first control channel to determine whether [[a]] the sub-packet of the traffic channel is to be shared comprises:

demodulating a pre-determined forward packet data control channel.

22. (Currently amended) The method as claimed in claim 15, wherein said demodulating the traffic channel in accordance with said determined multiplexing and the enabling information ~~if the acquired identity is identical to an identity of the subscriber station~~ comprises:

determining a size of a traffic channel unit and a number of code channels in accordance with the enabling information if the traffic channel unit is code multiplexed; and

~~demodulate~~ demodulating the traffic channel unit.

23. (Currently amended) The method as claimed in claim 18, wherein said demodulating the traffic channel in accordance with the enabling information ~~if the acquired identity is identical to an identity of the subscriber station~~ comprises:

determining a number of sub-divisions of ~~traffic channel unit~~ the sub-packet and a starting sub-division in accordance with the enabling information if the ~~traffic channel unit~~ sub-packet is time multiplexed; and

~~demodulate~~ demodulating the ~~traffic channel unit~~ sub-packet.

24. (New) The method of Claim 1, wherein two sub-slots include data intended for two subscriber stations.

25. (New) The method of Claim 1, wherein X number of sub-slots include data intended for a first subscriber station, Y number of sub-slots include data intended for a second subscriber station, and X is different from Y.

26. (New) The method of Claim 10, wherein demodulating a first control channel to determine whether the sub-packet of the traffic channel is to be shared further comprises comparing a subscriber station identity block of the pre-determined forward packet data control channel with a reserved value.